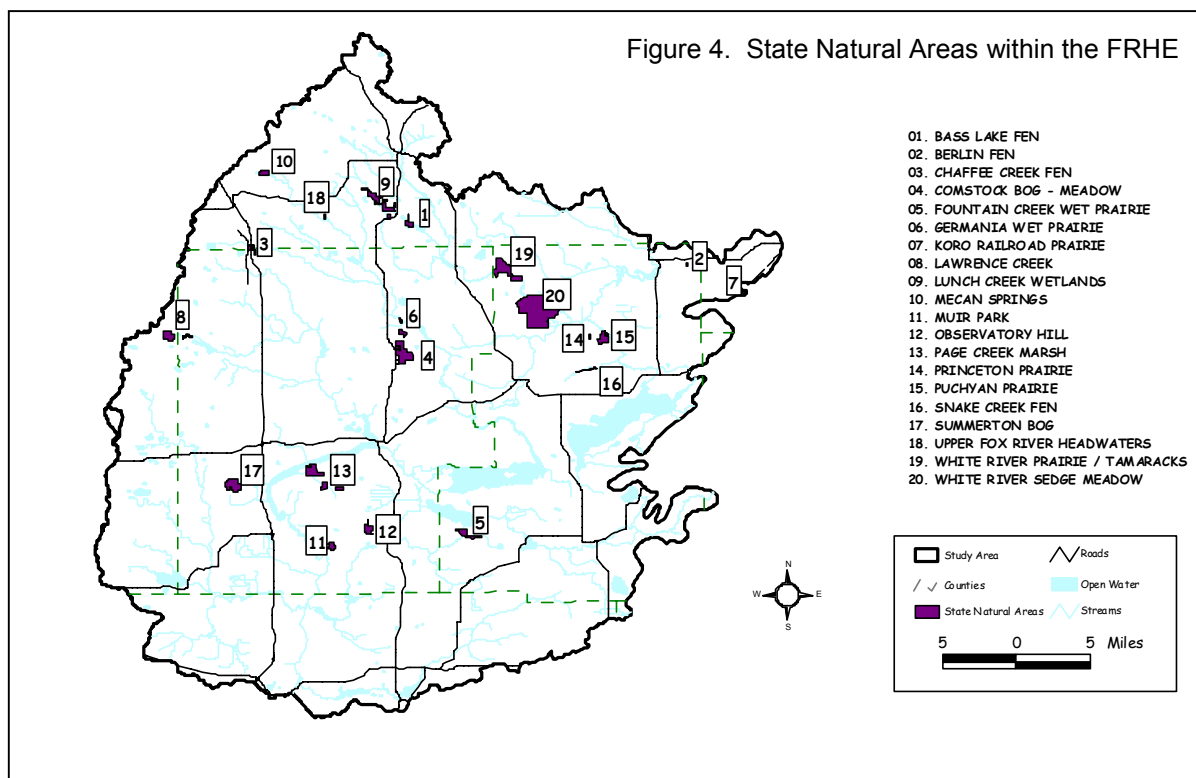


Public Conservation Lands

Approximately 7.5 percent of the study area is currently in public ownership for conservation, recreation and aesthetic purposes. The public entities include the WDNR, the United States Fish and Wildlife Service (USFWS), and local governments. In addition, private conservation organizations are actively managing lands to protect and enhance ecological attributes. Figures 4 and 5 illustrate the distribution of the various publicly owned properties throughout the study area.

State Natural Areas

State Natural Areas (SNAs) are formally designated sites devoted to scientific research, the teaching of conservation biology, and, especially, to the preservation of natural values and genetic diversity for future generations. There are currently 19 designated SNAs within the FRHE study area (Figure 4). Although formally designated by the WDNR, ownership is not restricted to the WDNR and often includes other governmental agencies, private land trusts (e.g., The Nature Conservancy), and individual landowners.



The purpose of the State Natural Areas program is to locate and preserve a system of State Natural Areas harboring all types of biotic communities, rare species, and other significant natural features native to Wisconsin. Thus, a variety of natural features occur within the SNAs in the study area and capture significant examples of the native species and natural communities representative of the study area and the state. A description of each of the following SNAs is located in Appendix C.

- Bass Lake Fen (77 acres)
- Berlin Fen (22)
- Comstock Bog-Meadow (632)
- Fountain Creek Wet Prairie (145)
- Germania Wet Prairie – within Germania SWA (95)
- Koro Prairie (3)
- Lawrence Creek (295)

- Lunch Creek Wetlands (457)
- Muir Park (150)
- Observatory Hill (100)
- Page Creek Marsh (392)
- Princeton Prairie (20)
- Puchyan Prairie (169)
- Silver Lake (official project area)
- Snake Creek Fen (31)
- Summerton Bog (428)
- Upper Fox Headwaters
 - Caves Creek Unit (70)
 - Chaffee Creek Unit (60)
 - Zinke Lake Unit (25)
- White River Prairie/Tamaracks – within White River Marsh SWA (780)
- White River Sedge Meadow – within White River Marsh SWA (3300)

State Wildlife and Fisheries Areas

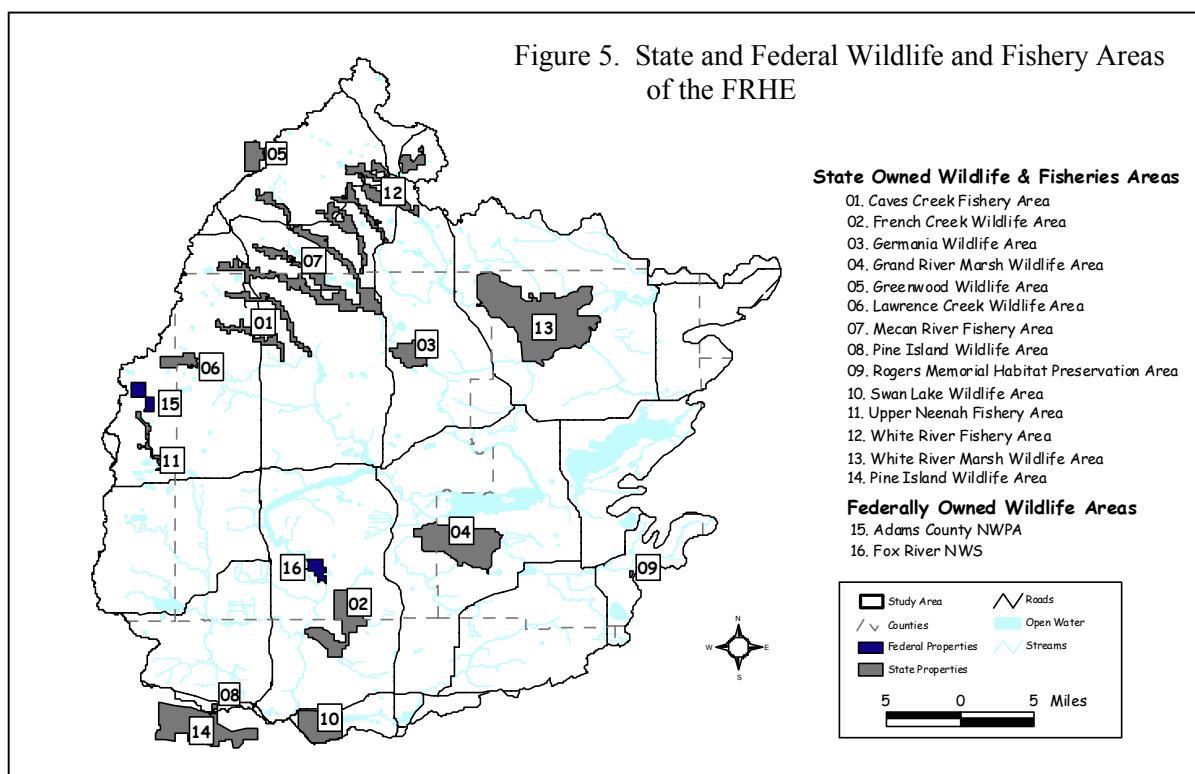
There are four WDNR-managed State Fishery Areas (SFA) and part or all of nine State Wildlife Areas (SWA) within the FRHE, covering a total of 57,250 acres within the FRHE (Figure 5). These properties are managed to provide habitat for native fish and wildlife and recreational opportunities for the public. Ecological significance varies a great deal among properties and within individual properties, depending upon the natural features present, property size and context, and past and current management. Greenwood SWA and Pine Island SWA are located outside of the FRHE study area boundary but are included in the study area due to their size, diversity, and because they were immediately adjacent to the FRHE.

- Caves Creek SFA (2,981 acres)
- French Creek SWA (4,675)
- Germania SWA (2,485)
- Grand River Marsh SWA (7,737)
- Greenwood SWA (1,441)
- Lawrence Creek SWA (1,156)
- Mecan River System SFA (11,202)
- Pine Island SWA (7,271)
- Rogers Memorial Habitat Preservation Area (75)
- Swan Lake SWA (4,416)
- Upper Neenah SFA (935)
- White River Marsh SWA (17,235)
- White River System SFA (5,024)

Federal Properties

Two federal conservation properties are located within the study area (Figure 5):

- Fox River National Wildlife Refuge (1001 acres) – established in 1978 to protect the area known as the Fox River Sandhill Crane Marsh. The refuge preserves wetland and upland habitat along the Fox River in order to support wildlife communities significantly different from other habitats within the region, as well as protect an important breeding and staging area for the greater sandhill crane. The Refuge contains 10 distinct plant communities ranging from upland coniferous and deciduous woodlands to five wetland communities. There are about 150 species of wildlife known from the Refuge.
- New Chester Waterfowl Production Area - Adams County (344) – Owned and managed by the U.S. Fish and Wildlife Service as part of the National Wildlife Refuge System, the property consists of approximately 80 acres of wetland with the balance being grassland and woodland. The site provides habitat for waterfowl, other migratory birds, and resident wildlife. The New Chester WPA is open to hunting, trapping, fishing, wildlife observation, hiking, cross-country skiing, nature study, and photography, subject to all applicable federal and state laws. Local coordination and management is the responsibility of the Leopold Wetland Management District office at Portage, WI.



Previous Assessments of Significant Ecological Landscapes

Various large-scale research and planning efforts have identified a number of locations within the FRHE as being ecologically significant. The following are examples of such studies and the sites that were identified.

❖ Potential Landscape Scale Management Opportunities For Southern Wisconsin's Most Threatened Landscapes: Open grassland/Prairie, Upland Interior Forest, & Savanna and Prairie/Forest Ecotone

In 1994-1995, the WDNR's Bureau of Research (now known as Integrated Science Services) conducted a study to identify the State's most critically threatened landscape types and locate opportunities for cooperative and integrated landscape-scale management of these types (Krause 1995). The report identified three major landscape types (savanna/prairie-forest ecotone, grassland/prairie, and upland interior forest) that were determined to be priorities for protection in order to conserve important elements of Wisconsin's natural biological diversity. The report culminates with a description of specific sites that offered management and conservation opportunities for each of the critically threatened landscapes.

Three sites within the FRHE were identified as statewide critical management areas for the **Savanna and Prairie/Forest Ecotone** – specifically for oak barrens (no jack pine component). They include:

- Oxford Oak Barrens
- Germania/Comstock Oak Barrens
- Thompson Lakes Oak Barrens

Two lowland sites included in the FRHE were identified as statewide critical management areas for the **Open Grassland/Prairie landscape**, including

- Puchyan-White River/Princeton Marsh
- Pine Island

❖ **The Wisconsin Grassland Bird Study**

The WDNR Bureau of Integrated Science Services (formerly Bureau of Research) conducted the Wisconsin Grassland Bird Study from 1985-1997. The study focused on grassland bird distribution and abundance, community composition, habitat preferences, habitat requirements, population trends, and response to land use changes. A report was published (Sample and Mossman 1997) for natural resource managers that identified *Priority Landscapes* and *Priority Sites* for grassland bird habitat. The *Priority Landscapes* detailed in the report represented “unique opportunities for landscape-scale grassland management that should not be missed.”

The White River Marsh complex, located within the FRHE, was ranked as the number five *Priority Landscape* in the state. In addition, the following sites, located within the White River Marsh complex were listed as *Priority Sites* for management focus:

- Puchyan Prairie SNA
- White River Marsh Wildlife Area
- Comstock Bog - Meadow SNA
- Germania Wildlife Area

Four additional locations within the FRHE but outside of the White River Marsh complex were listed as *Priority Sites* in the report.

- Fox River Crane Marsh⁸
- French Creek Wildlife Area
- Greenwood Wildlife Area
- Grand River Marsh Wildlife Area
- Lunch Creek Wetlands
- Pine Island Wildlife Area

❖ **Nature Conservancy Ecoregional Planning**

The Nature Conservancy (TNC) completed an ecoregional plan for the Prairie-Forest Border Ecoregion for most of southern Wisconsin and portions of Minnesota, Iowa, and Illinois (TNC 2001). The resulting portfolio of Ecologically Significant Areas represents viable natural community types, globally rare native species, and other selected features. Eight of these areas are located within the FRHE (Figure 6), and all were included in the final list of sites for this report.

Five of TNC’s Ecologically Significant Areas were listed as *functional sites* (meaning that they were “selected for one or more small-patch or large-patch plant communities, or an aquatic ecological system target. Rare species targets may or may not also be present”):

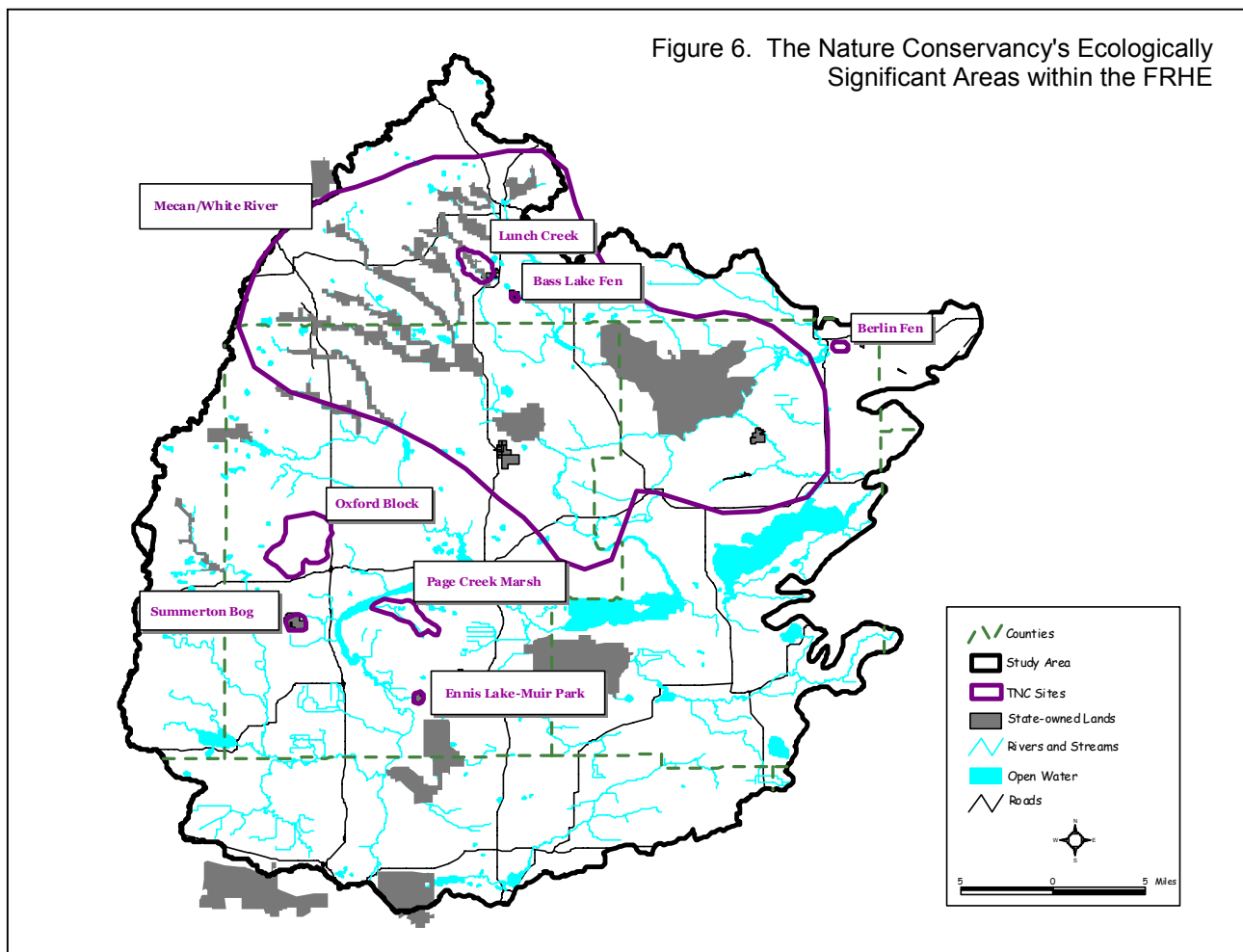
- Bass Lake Fen
- Berlin Fen
- Ennis Lake-Muir Park
- Lunch Creek
- Summerton Bog

⁸ note: this site is within the boundary of the Grand River Marsh Wildlife Area site from the workshop

The **Mecan/White River** site was considered a *Functional Landscape*, indicating that it was “selected for both coarse-scale plant community and aquatic ecological system targets.” *Functional Landscapes* may also include rare species targets. Many of the targets represented at these types of areas are viable, but some degree of restoration activity may be required to perpetuate them and ensure their future viability.

Two other TNC sites were listed as *Restoration Landscapes* - sites that are “selected for both coarse-scale plant community and aquatic ecological system targets.” *Restoration Landscapes* are generally significantly degraded by past land use, fire suppression, hydrologic alteration, or other factors, so conservation strategies are primarily focused on restoration activities:

- Oxford Block
- Page Creek Marsh



❖ **Land Legacy Study**

At the request of the Wisconsin Natural Resources Board, the WDNR undertook a study, entitled the Land Legacy Study, to identify places that will be critical in meeting both conservation and recreation needs over the next fifty years. Over the past three years, public meetings and staff workshops have been held throughout the state to gather opinions and local knowledge about the lands and waters of the state. Several people involved with the FRHE assessment also contributed input to the Land Legacy Study. Although the Land Legacy Study's criteria for identifying critical places are broader than those used in the FRHE (and cover recreation aspects), it is expected that there will be some overlap in the important places identified in each report. The Land Legacy Report is scheduled for release in mid to late November 2002.